DOE'S STRATEGIC PLANNING

DOE's Strategic Planning Process

Improving Performance and Providing Results

During the last decade, Congress and the Administration passed several laws and undertook initiatives to reform management throughout the government. The Government Performance and Results Act (GPRA) of 1993, the Chief Financial Officers Act of 1990, the Government Management Reform Act of 1994 (GMRA), the Federal Acquisition Streamlining Act of 1994, and the Information Technology Management Reform Act of 1996 all focus on improving the way agencies performed their mission and providing increased accountability for taxpayer-funded programs.

DOE's first Strategic Plan was published in April 1994, three and a half years before GPRA required such a plan. That plan identified the four business lines of the Department. Business lines provide the means by which we integrate the Department's activities and by which we plan to utilize effectively our unique scientific and technological assets, engineering expertise, and facilities. The second DOE Strategic Plan, September 1997, was the first that we published under GPRA. In developing that plan, we consulted with Congress as well as program stakeholders.

This plan, our third, builds on our previous plans and upon recent efforts to update and improve our strategies. For example, it benefits from the *Comprehensive National Energy Strategy* and the Environmental Quality plan *Accelerating Cleanup: Paths to Closure*. Also, compared to prior plans, our goals and objectives are greatly improved. They are more quantified, more achievable, and we can measure progress much better.

The DOE Strategic Plan influences all performance planning for the Department. This plan sets the general goals, objectives, measures, and strategies that will be implemented through the Annual Performance Plan, the budget, and the Annual Performance Agreement between the Secretary and the President.

Integrating Planning into Decision-Making

DOE is committed to performance-based management as the approach to manage the Department and its activities. In performance-based management, goals are established through consensus. Self-assessment is the primary tool for assessing and evaluating performance, and measurable results are used as we review our performance improvements and make decisions on the allocation of resources. In this way, the Department uses performance-based management as its tool to:

- Plan for, manage, evaluate, and reward performance by organizations, employees, and contractors;
- Improve the delivery of products and services and facilitate communications with customers and stakeholders;
- Encourage employees and contractors to achieve excellence; and
- Guide decision-making.

Performance-based management reinforces and formalizes the Department's Strategic Management System.

The Department also recognizes that no management approach can anticipate all potential situations. In addition, we accept that because we are stewards of public funds and work for the American taxpayers, how we do our work is often as important as the end-results of our work. Therefore, DOE's performance-based management approach includes the necessary flexibility and mechanisms to ensure effective stewardship of public funds and accountability to the American taxpayer.

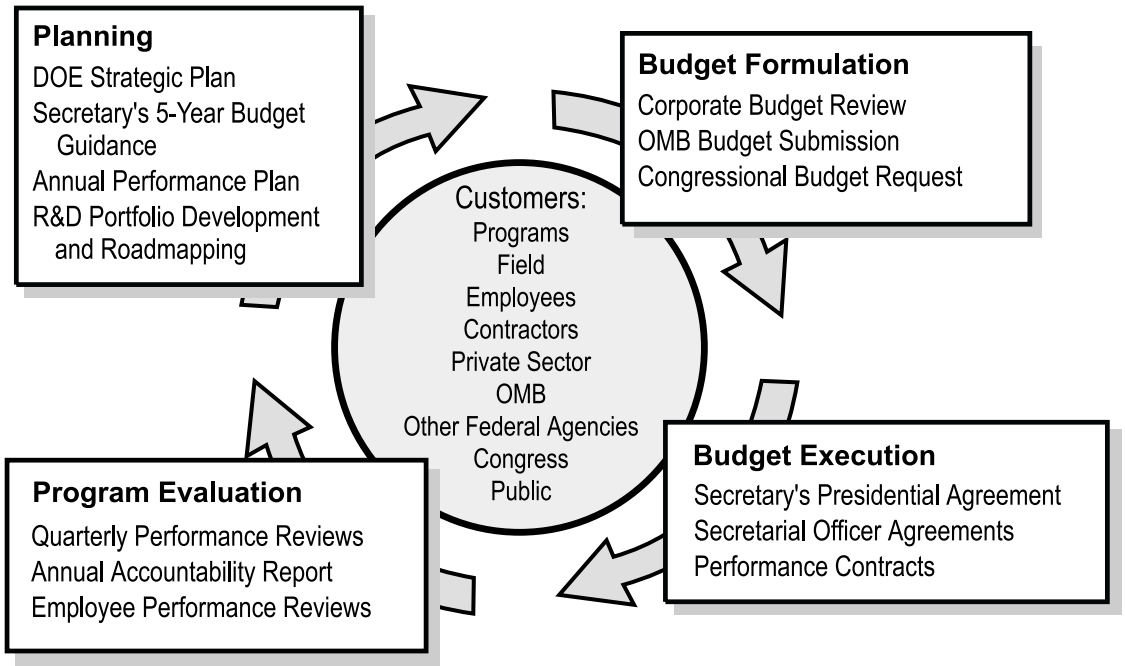
DOE's Strategic Management System

To meet new challenges, the Department had to significantly improve its management processes. In March 1996, DOE developed and implemented a corporate Strategic Management System for the FY 1998 and outyear budget cycles. The system combines the processes for strategic planning, budgeting, and program evaluation that had previously not been well integrated within the Department. It provides the framework to satisfy the financial and management requirements set by the Government Performance and Results Act, the National Partnership for Reinventing Government, and other legislation. The key processes and products that form the framework of DOE's Strategic Management System are graphically portrayed in the figure below.

Performance, as indicated by measurable results, is the basis of the Strategic Management System. Consistent measures are used throughout the processes of planning, budget formulation, budget execution, and program evaluation. Thus, performance means much more than just accomplishing activities. It means measurable progress toward delivering desired outcomes and results to customers.

In plans, performance is defined in terms of measurable results. In budget formulation and execution, resources are allocated and expended to deliver measurable products and services. In evaluation, success is based upon the

Elements of the Strategic Management System Framework



measurement and analysis of what is actually delivered. This concept of performance is now used by all of the Department's organizational levels, i.e., from the DOE Corporate level down to the contractor level. Ultimately, the measurement of performance allows the Department to ensure consistency between the Department's long-term vision and the day-to-day activities of individual Federal and contractor employees.

Performance Starts with Strategic Planning

The Department uses its Strategic Management System to manage the execution of its programs from planning through program evaluation. Strategic planning is an integral first step in the process. The Strategic Plan is the basis for all lower-level planning within the Department. It sets the long-term directions and policies to be carried out by DOE's programs and field organizations. In all of the Department's activities, performance is measured against the general goals, objectives, and measures set out in this Plan.

General goals are long-term and outcome-oriented. They are stated in a manner that allows in the future an assessment of progress, i.e., whether the goals were, or are being, achieved. Because the goals are measurable and quantifiable, the Department can assess its progress in pursuit of the goals over the duration of the Plan.

Objectives define major accomplishments that contribute to achieving the general goal. Objectives are measurable, achievable, and reasonable targets with deadlines. By reasonable we mean that within credible planning assumptions, a DOE program should be able to achieve the objective, and that the objective is meaningful at the national level.

Measures expand on the stated objectives. They specify the basis by which DOE will ascertain that it is making progress toward achieving this objective. Measures define key program events on the way to meeting the objective. They describe precisely what will be measured, as well as the expected time for performing key events. In this sense, we say that the measures establish a baseline for a given program. If direct measurement is difficult, other performance indicators will be used.

Strategies are the activities that support an objective. In most cases, strategies are the activities executed using the funds appropriated by Congress. Although they may not always be stated in outcome-oriented terms, the strategies are essential to accomplishing objectives.

Relationship Between the Strategic Plan, the Annual Performance Plan, and the Budget

GPRA requires that we describe the way in which the performance goals in the Annual Performance Plan relate to the general goals and objectives in the Strategic Plan. The Department attempts to establish a close relationship between these two sets of goals and we believe that consistency between the two sets of goals is essential if we are to establish a clear logic for managing our programs. By requiring us to integrate program budgets with plans, GPRA is fostering better decision-making within the Department and helping us to communicate more effectively the outputs and outcomes that the taxpayers are getting from their investment in DOE.

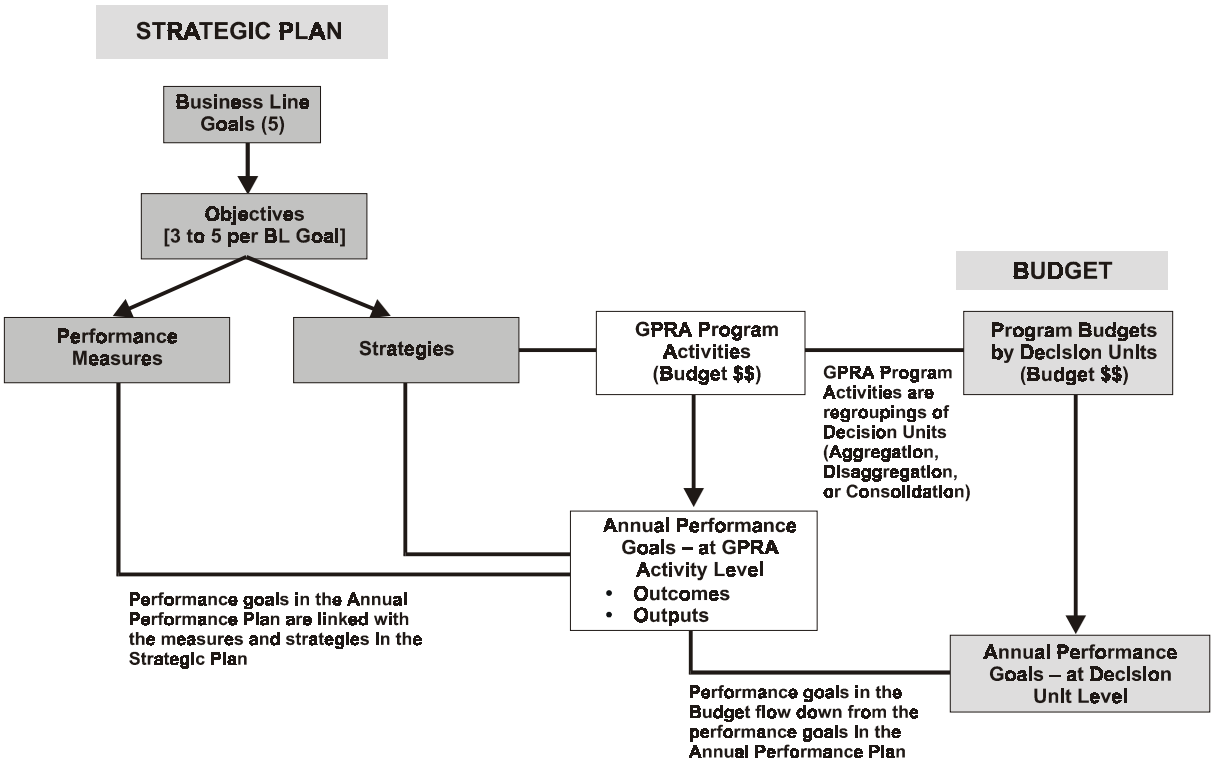
The Department has been executing Annual Performance Agreements between the Secretary and the President since FY 1995. These agreements are now subtitled "Revised Annual Performance Plans" and are directly linked with the Department's Strategic Plan. The

linkage between plans and the budget was originally achieved by using cross-reference tables. As shown by the figure, starting with the FY 2001 Annual Performance Plan, the connection between the two is achieved by organizing annual performance goals under budget "Decision Units." These are GPRA program activities, which are aggregations, dis-aggregations, or consolidations of activities in the Program and Financing Accounts (P&F) in the President's budget. Through the use of Decision Units, DOE integrates performance, budget, and strategic planning in a consistent manner.

This Strategic Plan goes one step further in establishing the connection among goals. In developing this Plan, our intent has been to make measures for the objectives "outcome-oriented," and make the strategies tie directly to the Decision Units (GPRA program activities). This approach will ultimately help us to achieve full integration and clear linkage between plans and program accounts. We recognize, however, that significant work remains to more clearly articulate these measures and strategies. Finally, we will establish in the Annual Performance Plan annual targets for the performance measures contained in the Strategic Plan, as well as "output" measures to show progress on the strategies.

Performance Agreements

For each year, after Congress appropriates funds, the Annual Performance Plans are formalized in the Performance Agreements between the Secretary and President. The Agreement includes adjustments to the annual measures based on actual appropriations. Although not required by GPRA, OMB allows revision of the "final" annual measures in Circular A-11. The Agreement documents the impact of budget adjustments to the Plan, which facilitates the



Relationship Between Strategic Plan, Annual Performance Plan and Budget

reporting of updated results. DOE managers attest by signature on the Agreement their pledges to produce results. Our mid-year review reinforces our focus on performance and provides an intermediate appraisal of status.

Reporting on Performance

DOE's *FY 1995 Annual Performance Report* was the first "condensed" report. It documented our performance in 61 pages of text as compared to the 500-page reports of prior years. At the end of FY 1996, we combined the performance report with the annual financial statements required by the Government Management Reform Act of 1994 (GMRA), to satisfy the requirement to report on the results of funded activities. The financial statements for FY 1996 also served as the annual report and received a "clean opinion" from DOE's Inspector General. For FY 1997, we again received a "clean opinion."

For FY 1998, we implemented OMB's recommendation and prepared an "Accountability Report" that covered the annual reporting requirements of several laws. With one exception, the Inspector General determined that our financial statements presented fairly the Department's financial position. The exception was in the estimate of the environmental liabilities which resulted in a "qualified opinion." In FY 1999, the previous year's issues were resolved and the Department received a "clean opinion" from the Inspector General.

The *FY 1999 Accountability Report* was also the first performance report required by GPRA. Reviews by DOE's Inspector General, the GAO, and our self-assessment highlighted areas where we need to improve. Through analysis of actual performance and its relationship to the desired outcomes, we have worked to improve the process in subsequent planning cycles. As indicated above, the goals and objectives for our third Strategic Plan are more quantified and achievable.

The Federal Energy Management Program (FEMP) provides an example of the effective use of performance measures on programs. The key measure for FEMP is to reduce energy use per square foot of building space. The Energy Policy Act of 1992 (EPAct) set the goal at 20-percent savings as compared to the 1985 baseline by the year 2000. Through FEMP's efforts, the government achieved the 20-percent goal. When the President set even higher goals for the next 10 years, FEMP's budget was increased by 23 percent for FY 2001 in recognition of their past successes and to adjust for the greater difficulty of achieving the next level of savings.

Role of Program Evaluation

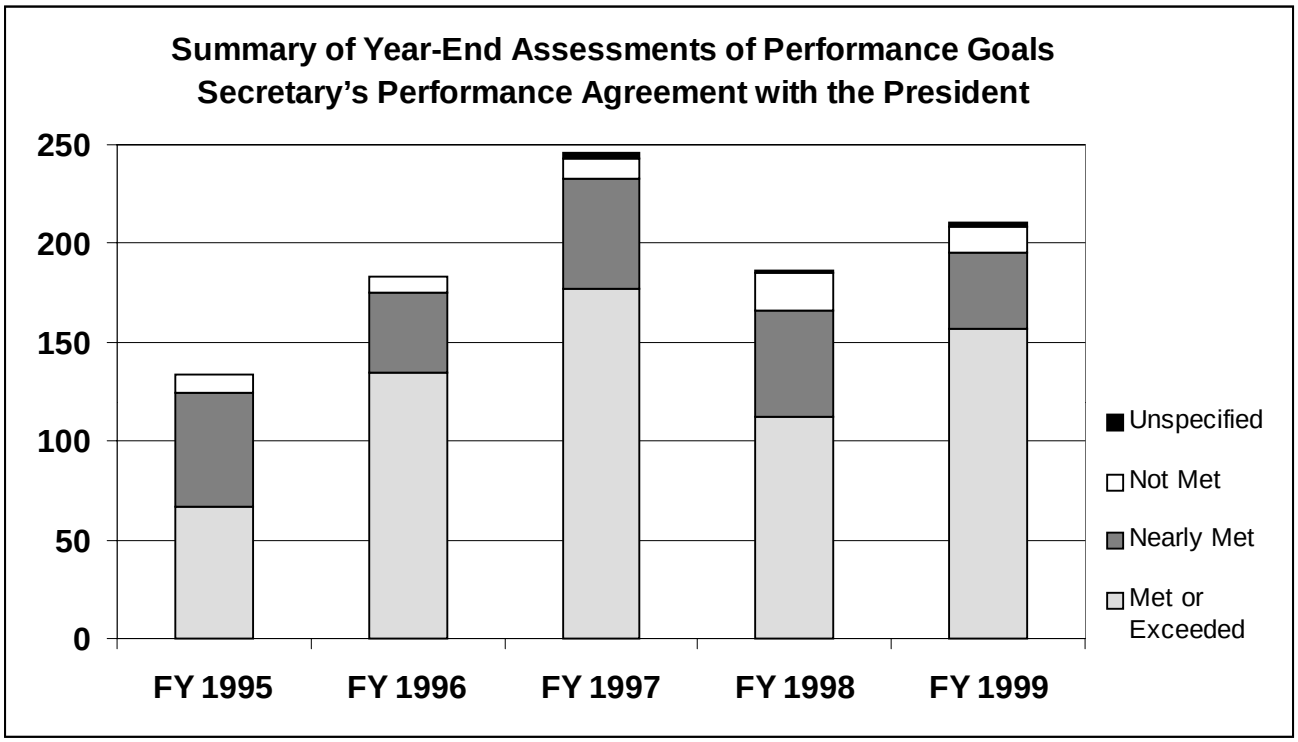
GPRA defines program evaluation as "*an assessment, through objective measurement and systematic analysis, of the manner and extent to which Federal programs achieve intended objectives*." The law requires agencies to describe in their strategic plans the program evaluations used to establish or revise general goals and objectives, together with a schedule for future program evaluations. In this Plan, we have discussed the major program evaluation efforts that have informed the development of our general goals and objectives within each business line. This section provides a more comprehensive description of the Department's processes to evaluate programs. Program evaluation, as defined above covers a broad range of evaluative activities. We group these evaluations into three major categories:

(1) ***Measurement of progress against quantitative, results-oriented, performance goals over time:*** The Department has developed Annual Performance Agreements between the Secretary and the President each year since FY 1995. The performance goals in these agreements represent our most significant outputs and outcomes for the fiscal year. We track the results toward the goals during the year

and report them once at mid-year and then at the end of year. We make these results publicly available on the World-Wide-Web. The chart below shows a summary of year-end assessments for FY 1995 - FY 1999.

(2) ***Reviews and Evaluations: Multi-discipline reviews, cross-program reviews, and management reviews to evaluate whether the programs and organizations are properly focused and are achieving their intended results:*** The major evaluations within each business line that the Department has conducted since the publication of the previous Strategic Plan are in the following tables. Through these evaluations, the Department is able to re-assess its programs and reorient them or apply additional resources in order to ensure that they achieve their intended objectives.

(3) ***Project reviews to ensure that activities are on schedule and that they will achieve their objectives within the level of resources allocated to the projects:*** The Department has conducted external independent reviews and internal independent reviews of nearly all projects involving the acquisition of capital assets or the environmental restoration of DOE facilities over the past two years. The purpose of these reviews was to determine if the scope, underlying assumptions, cost and schedule baselines, and contingency provisions were valid and credible within the budgetary and administrative constraints. There are many outstanding examples of first-rate facilities—completed or under construction—that have met, or are meeting their project objectives, on schedule, and within budget. However, the reviews also revealed that some of our projects have been poorly managed. In FY 1999, to correct these deficiencies, the Deputy Secretary instituted a Project Management Reform Initiative and established a strong corporate organization to strengthen the management of projects. The Department has developed an action plan geared to both the Deputy Secretary's initiative and to address findings in the National Research Council's 1999 report entitled, *Improving Project Management in DOE*. This plan is being aggressively implemented. The steps being taken include:



Program Evaluations through Multi-Discipline Reviews, Cross-Program Reviews, and Management Reviews

Title and Purpose	Date
Energy Resources:	
Technology Opportunities to Reduce U.S. Greenhouse Gas Emissions: Prepared by the National Laboratory Directors for the U.S. Department of Energy. This document was compiled by 11 National Laboratories and represents a peer-reviewed consensus evaluation of technology pathways to reduce greenhouse gas emissions with sustained economic growth. Forty-seven technology pathways are described that have significant potential to reduce CO_2 emissions. The technologies span three broad areas: energy efficiency, clean energy, and carbon sequestration.	Oct. 1997
Federal Energy R&D for the Challenges of the 21st Century: A review, by the President's Committee of Advisors on Science and Technology (PCAST), of the national energy R&D portfolio with recommendations on how to ensure that the United States has a program that addresses its energy and environmental needs for the 21st century.	Nov. 1997
Comprehensive National Energy Strategy: Pursuant to Section 801 of the Department of Energy Organization Act, the *Comprehensive National Energy Strategy* documents the Nation's energy policy; it was developed through active public participation.	Apr. 1998
Powerful Partnerships: The Federal Role in International Cooperation and Energy Innovation: A PCAST review of the potential benefits of various types of energy-related cooperation with other countries, with recommendations for an aggressive U.S. initiative to strengthen cooperation.	Jun. 1999
Energy Research and Development Portfolio: Volume 1 of a 4 volume R&D Portfolio provides an analysis of the complete set of R&D investments supporting Energy Resources.	Feb. 2000
Powering the New Economy: The report summarizes DOE's accomplishments, R&D programs, and ongoing energy challenges.	Sep. 2000
Scenarios of U.S. Carbon Reductions: A peer-reviewed study conducted by an inter-laboratory working group, documents how the four key energy sectors—buildings, transportation, industry, and electric utilities—could respond to directed programs and policies to expand adoption of energy-efficiency and low-carbon technologies.	Sep. 2000

Program Evaluations through Multi-Discipline Reviews, Cross-Program Reviews, and Management Reviews

Title and Purpose	Date
National Nuclear Security:	
Maintaining United States Nuclear Weapons Expertise (Chiles Commission): A report that offered 12 recomendations for the recruitment and retention of scientific, engineering, and technical personnel for the Stockpile Stewardship Program.	Mar. 1999
"30-Day Review": A comprehensive internal review of the Stockpile Stewardship Program.	Nov. 1999
DOE Research and Technology Against the Threat of Weapons of Mass Destruction: Review of the Department of Energy Office of Nonproliferation Research and Engineering (NN-20): A comprehensive review of R&D programs by the Nonproliferation and National Security Advisory Committee.	Feb. 2000
National Security Research and Development Portfolio: Volume 3 of a 4 volume R&D Portfolio provides an analysis of the complete set of R&D investments supporting National Security.	Feb. 2000
A Strategic Approach to Integrating Long-Term Management of Nuclear Materials: A consolidated account to Congress and the public of DOE's unclassified inventory of nuclear materials and a description of how and where they are managed. Includes an examination of opportunities for greater integration, and a description of next steps toward realizing those opportunities.	Jun. 2000
The Stockpile Stewardship Plan: Documents the result of a corporate-level, program review required by the National Defense Authorization Act for FY 1998 multi-year (PL 105-85).	Jun. 2000
Environmental Quality:	
Accelerating Cleanup: Paths to Closure: A site-by-site, project-by-project projection of the technical scope, cost, and schedule required to complete all 353 projects at DOE's 53 remaining cleanup sites in the United States.	Jun. 1998
Environmental Quality Research and Development Portfolio: Volume 2 of a 4 volume R&D Portfolio provides an analysis of the complete set of R&D investments supporting Environmental Quality activities.	Feb. 2000
Status Report on Paths to Closure: Updates the June 1998, *Accelerating Cleanup: Paths to Closure* study and introduces additional analyses that offer new insights into the long-term scope of the Environmental Management program.	Mar. 2000

Program Evaluations through Multi-Discipline Reviews, Cross-Program Reviews, and Management Reviews

Title and Purpose	Date
Science:	
Planning for the Future of High Energy Physics: A subpanel report of the High Energy Physics Advisory Panel on future opportunities, needs, and directions for the field.	Feb. 1998
Human Genome Project Five-Year Plan (1999-2003): Developed during a series of DOE and National Institutes of Health workshops and advisory committee meetings, and reviewed by DOE's Biological and Environmental Research Committee, a collaborative five-year plan addressing the research needs, required actions, and national and international coordination needed to complete the sequencing of the human DNA by 2003.	Oct. 1998
Office of Science Strategic Plan: The Department held two workshops, as part of a long-range planning process to define the goals, objectives, strategies, and the portfolio of research that DOE sponsors.	Jun. 1999
Complex Systems - Science for the 21st Century: addresses the broader issues, opportunities and plans for the science behind fundamental complex structures, how they interact to create new phenomena and assemble themselves into devices, and how they can be designed atom by atom for desired characteristics.	Aug. 1999
Nanoscale Science, Engineering, and Technology Research Directions: A study conducted in preparation for the national, interagency research initiative in nanotechnology, the report describes important research directions based on new tools, new understanding, and a developing convergence of the disciplines of physics, chemistry, materials science, and biology.	Sep. 1999
Priorities and Balance Within the Fusion Energy Sciences Program: A review and evaluation of the balance, priorities, and long-range goals within the research program, prepared by the Fusion Energy Sciences Advisory Committee.	Sep. 1999
Science Research and Development Portfolio: Volume 4 of a 4 volume R&D Portfolio provides an analysis of the complete set of science activities organized around twelve major challenges.	Feb. 2000
Scientific Discovery through Computing: A plan submitted to the U.S. Congress addressing the broad-based computational needs of the DOE scientific community and corresponding future directions in DOE advanced computational modeling and simulation.	Mar. 2000

- Creating a corporate project performance and corrective action tracking system.
- Subjecting projects with significant problems to more stringent reporting requirements and controls by placing them on the Chief Operating Officer's "Watch List."
- Strengthening DOE line management authority and accountability for project execution and performance.
- Strengthening contractor measures and incentives for project execution and performance.
- Establishing a project management oversight capability within the offices of all Lead Program Secretarial Officers.
- Creating a DOE Management Development Program for program and project managers.
- Improving project management through the implementation of best practices in project planning, funding, control, and reporting.

Management Challenges for the Department

The Department strives to continually improve its management processes and to become a more efficient and effective organization. Toward this end, we have established objectives and performance goals in all aspects of management. In a large organization with diverse missions, there are always specific areas that need special management focus. To identify areas that need attention, the Department has instituted an annual self-assessment process pursuant to the Federal Manager's Financial Integrity Act (FMFIA). In addition, we get critical insight into specific problem areas through independent evaluations by the Department's Inspector General, as well as through the studies undertaken by the General Accounting Office.

DOE has taken a proactive approach to dealing with management challenges. These challenges—and the actions we are taking to address them—are being integrated into our GPRA planning process. The following table provides a list of the management challenges that we are currently addressing, as well as those where we have already taken corrective actions. Where we have instituted corrective actions, we establish additional, specific performance goals and track them closely until there is substantial improvement in performance.

DOE Management Challenges	Strategic Plan Business Line and Objectives
Surplus Fissile Material	NS4
Environmental Compliance	EQ1
Nuclear Waste Disposal	EQ1, EQ2
Safety and Health	CM1
Project Management	CM3
Security	NS6
Mission Critical Staffing	NS3, SC4, CM2
Permitting Issues at the Waste Isolation Pilot Plant	EQ1
Contract Management	CM3
Inadequate Audit Coverage	CM5
Slow Transition to External Regulation	See Below
Organizational Structure Blurs Accountability	CM3
Staff Lacks Technical and Management Skills	CM2
DOE Infrastructure	See Below
Management of Export-Controlled Assets	See Below

External Regulation

The Department has examined the issues associated with shifting some of its facilities exclusively to external regulation. On February 19, 1999, the Secretary, via a letter to the House Science and other committees, advised that ".... Our analysis to date indicates that many potential benefits ... have not been demonstrated," and that "Consequently, we have determined that submittal of legislation to exempt certain facilities from Departmental regulations is premature." The Secretary promised that the Department will ".... complete our work with NRC, OSHA, and the States...[and]... evaluate whether the substantial funds required to prepare DOE facilities for a shift to external regulation would be better spent on achieving the Department's cleanup mission goals." The reports of the pilots (i.e., pilot studies of implementing of external regulation) have been delivered to the Congress as promised. The Secretary also promised that the Department would take immediate steps to "... redouble its efforts to provide a safe and healthy workplace ...." Those efforts are currently underway. All actions on this recommendation are complete, and Congress no longer contemplates external regulation of the Department's facilities.

DOE Infrastructure

For many years, the Department has lacked processes to ensure its infrastructure is adequately maintained. As a result, due to decades of deferred maintenance and upgrades, much of the Department's infrastructure is in poor condition. Unsafe conditions, lost-time delays, and more frequent and costly maintenance have resulted from deferring maintenance at our aging facilities.

To improve the condition of its infrastructure, the Department implemented a long-range strategy that strengthens the process for managing capital

assets, including the acquisition, maintenance, modernization, and/or eventual disposal of infrastructure. In addition, a Functional Cost Reporting System, which includes maintenance data has been deployed. It provides information on infrastructure upgrade requirements. We will seek to further enhance the available financial information in the Department's new Business Management Information System, which is now under development. We believe the processes now in place are adequate to maintain our infrastructure.

Export-Controlled Assets

In the past, there has been inadequate control over government personal property by the Department's management and operating contractors at some DOE facilities. This deficiency primarily involved inventory control and reporting. Problems resulted from inadequate policies and procedures, together with a lack of adequate attention by contractors to systems for managing personal property. To remedy this situation, Departmental policies were strengthened to increase emphasis on property management by DOE and contractor employees, to ensure extensive coverage of high-risk property, and to address critical problems identified by audits and investigations. During the period 1995 to 1999, third-party oversight confirmed that DOE's performance improved in the area of inventory management. However, in the last year, two incidents have occurred that suggest DOE may need to initiate additional safeguards to protect export-controlled property. In both cases, comprehensive analyses of root causes uncovered how and why existing procedures were not followed and identified new actions that are needed to prevent similar future security incidents.

Consultations on this Strategic Plan

The Department initiated public consultation on the draft of this Strategic Plan with a press release on February 24, 2000. The DOE Homepage and other public forums were also used to notify the public of the draft Plan, which was posted at a web site together with a comment center. March 31, 2000 was set as the due date for comments but was extended until April 10, 2000. In addition, copies of the draft were circulated to the Office of Management and Budget (OMB), Congress, and other Federal agencies for coordination with their planning processes.

On April 4, 2000, we met with staff representing several Congressional committees, including the House Science Committee, Senate Government Affairs Committee, House Commerce Committee, and Committee on Government Reform. On April 18, 2000, we consulted with the Office of Management and Budget. On April 28, 2000, we met with the staff of the Senate Committee on Energy and Natural Resources. Comments from Congress were received from F. James Sensenbrenner, Jr., Chairman of the House Science Committee, in a letter dated July 13, 2000. All comments were considered and incorporated into the plan as appropriate.

The Department received considerable response to the draft plan from the public. There were over 2,500 visitors to the web site. Several hundred of the visitors were citizens who would otherwise not have access to the Department's plans during the consultation process. We received approximately 500 comments from interested parties including citizens, other Federal agencies, energy industry representatives, educators, and DOE Federal and contractor employees. We also benefitted from the efforts of the Council for Excellence in Government, which reviewed our draft Plan.

Other significant consultations take place continuously in support of ongoing planning activities including those that led up to development of this Strategic Plan. The general public and/or stakeholders provided input during the preparation of the *Comprehensive National Energy Strategy*, *Accelerating Cleanup: Paths to Closure*, DOE's *FY 2000 Stockpile Stewardship Plan*, the *Office of Science's Strategic Plan*, and the DOE Research and Development Portfolios. These and similar consultations inform our strategic planning.

Implementation of the Nuclear Waste Policy Act is an example of DOE's thorough commitment to public consultation. Through formal and informal processes, DOE interacts frequently with Federal regulatory agencies, the Congress, the State of Nevada, affected units of local government, and diverse program stakeholders such as environmental groups, technical and professional organizations, policy groups, electric utilities, and Tribal Nations. Each program milestone presents opportunities for public participation and consultation, and many key program actions continue to be subject to the formal public comment process.

In addition, the Department works with the Defense Nuclear Facilities Safety Board (DNFSB) to implement its recommendations regarding public and worker health and safety at the Department's defense nuclear facilities. The Department also solicits advice and guidance from the Environmental Management Advisory Board (EMAB) on a wide variety of topics related to the Environmental Management Program. The EMAB's membership consists of State and local government representatives, technical experts, and stakeholders. Furthermore, the Department solicits advice from Site Specific Advisory Boards that have been established for 11 sites. The Boards provide consensus advice and recommendations to the Department's environmental restoration and waste management activities.

Interagency Crosscutting Coordination

In many instances, the Department achieves its goals and objectives by relying alone on our unique capabilities and program activities. In other cases, our success depends on ongoing relationships with a number of Federal agencies, State and local governments, Tribal Nations, private industry, and Congress. We recognize that crosscutting government responsibilities such as national security and multi-agency programs in areas such as global climate change, medical research, and science education draw upon the expertise and capabilities of many agencies to achieve common goals. For such efforts, the challenge for each agency is to define its role and to develop programs that best use its unique financial, human, and technical resources to optimize overall government performance. See Appendix A for a detailed list of DOE's interagency crosscutting coordination activities.

The Office of Management and Budget (OMB) and the White House Office of Science and Technology Policy play an important leadership role in coordinating science and R&D efforts. The National Security Council coordinates national security policy covering nuclear weapons, arms control, and nonproliferation issues.

DOE is committed to continue working closely with other Federal agencies and with OMB and Congress to affect interagency crosscutting coordination. The following examples illustrate our efforts to coordinate with other agencies to avoid duplication of effort and reduce the cost to taxpayers.

For nonproliferation and arms control programs, the National Security Council coordinates policy. The State Department is the lead agency for all U.S. policy matters dealing with other countries. The Department of Energy provides technical support for treaty negotiation, verification, and

compliance, as well as technical capabilities for detecting the proliferation of weapons of mass destruction.

The Partnership for a New Generation of Vehicles was launched in September 1993. It is a partnership between the Federal government and the United States Council for Automotive Research—a cooperative research effort among Daimler-Chrysler Corporation, Ford Motor Company, and General Motors. The lead Federal agencies include the Departments of Energy, Commerce, Transportation, and Defense. The Environmental Protection Agency, the National Aeronautics and Space Administration, and the National Science Foundation also contribute. The Operational Steering Group and the Technical Task Force, consisting of senior representatives and technical staff of the partners, set the research objectives and identify special projects and priorities, respectively.

In addition to cost-sharing, the partnership offers many precedent-setting opportunities to combine and build upon complementary technologies that have been developed separately for other purposes. As examples, DoD has extensive expertise in the area of advanced materials (developed originally for high-tech weapons programs); NASA has state-of-the-art expertise in systems integration (developed through work on the space shuttle); and DOE offers advanced technologies in materials, alternative fuels and propulsion systems areas (developed through decades of cutting-edge R&D work).